# CUSTOMIZED ORTHOPEDIC SHOE SOLES REV. DEBORAH JEAN HINTEN M.S.

5701 Leetonia Road

Leetonia, Ohio 44431

Telephone:

1-(330)-424-9171

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# UNITED STATES PATENT AND TRADEMARK OFFICE

REV. DEBORAH JEAN HINTEN M.S., OF LEETONIA, OHIO 44431,
AN UNITED STATES CITIZEN

**CUSTOMIZED ORTHOPEDIC SHOE SOLES** 

## **PREAMBLE**

According to the *Webster's Dictionary*, the word, "customized" or "custom made" means "made to order". The word "orthopedic" means "a treatment and cure of skeletal deformities". These shoe soles will be "customized" or tailor made to fit any size of specified purchased shoes. The layer of stiff heavy solid wood will become an effective treatment and cure of skeletal deformities. Therefore the desired descriptive name for the present invention is "Customized Orthopedic Shoe Soles".

# BACKGROUND OF THE INVENTION

The present invention pertains to shoe soles. More specifically, to a sole which has orthopedic qualities and can be attached to purchased shoes.

# PRIOR ART

Frequently many podiatrists are perplexed in helping their patients with multiple walking problems (hammer toes, twisting foot movements, short hamstring muscles, scissors gait and others). In a few cases, prescribed orthotic devices do even more

harm. Thus, recommended surgery is a painful alternative.

The post surgical shoe patent # 4,677,767 and manufactured by Darco has limitations. It should not be prescribed for a metatarsal or toe injuries or weak ankles. In some cases, the tiny wedged heel will throw the individual's weight upon the injury and allow weak ankles to roll even more.

The (no longer manufactured) perfectly flat lace cast shoe by Professional Products (P. O. BOX 589 De Funiak Springs, Florida 32433) was much better. The flat sole did not aggravate short hamstring muscles. However, if one had a metatarsal or toe injury, drawing up and tying the shoe lace up side down was almost an impossibility. Now the tied bow became a definite safety hazard. Plus, the shoe was made from flimsy canvas material. To avoid all safety hazards and gain the desired stability, the individual must tear apart, reconstruct and customized the shoe.

The buckled hook and loop fastener strapped post surgical shoe by Professional Products (P. O. BOX 589 De Funiak Springs, Florida 32433) is an excellent designed shoe. This surgical shoe literality wraps around and cradles the injured foot. However, this post surgical shoe is not intended to be used on a regular daily bases.

In all the above cases, the smallest generic size is an adult four (4) to six (6).

BRIEF SUMMARY OF THE INVENTION

Excluding orthotic devices, there is no known invention to solve complex walking problems easily, pain free and economically. Excluding orthotic devices, there is no known invention to help avoid foreseen surgical procedures. There is no known

invention that is custom made to fit anyone (including infants). Excluding orthotic devices, here is no known invention which stabilizes shoes.

It is interesting to note, heavy Dutch wooden shoes were prescribed to cure rickets.

Sometimes our physicians need to consider and apply that wise doctor's advice.

Sometimes many modern practiced techniques for solving walking problems only produce other skeletal deformities.

The principal objective of the present invention is to help solve complex walking problems pain free and economically. Not only will the present invention help prevent corrective surgery, but it will provide solutions for: (a) hammer toes, (b) unnecessary twisting foot movements, (c) short hamstring muscles, (d) toe walking, (e) scissors gait, (f) poor walking posture, (g) skeletal realignment, (h) weak leg muscles, (i) weak abdominal muscles, (j) shallow breathing, and (k) surprisingly weight gain. All these benefits for the cost of: wood, rubber, fasteners and adhesive glue.

# BRIEF DESCRIPTION OF TWO VIEWS OF THE DRAWINGS

FIGURE 1 illustrates an overall side exterior view of the preferred embodiment of the present invention attached to a purchased shoe.

FIGURE 2 illustrates the interior view of the purchased shoe and demonstrates the method of attaching the present invention.

# DETAILED DESCRIPTION OF THE INVENTION

The overall preferred embodiment of the present invention is described in connection with FIGURES 1 and 2. In both cases, the fasteners 6 demonstrate the method of attaching the present invention and represents the fasteners 6,

themselves. The number of fasteners 6 drawn does not represent any specific number. Both drawings depict an opened preferred perfectly flat tie skateboard shoe or the specified purchased shoe 1. FIGURE 1 illustrates the side exterior view. FIGURE 2 depicts the simple assembly process of using fasteners 6 through the built in insole 7 to secure the present invention to the specified purchased shoe sole 3.

The simple assembly of the present invention comprises of the following steps:

- 1. The specified purchased shoes 1 of any size must fulfill the following requirements:
  - (a) removable insoles or have enough room to slip in sheep skin rubber backed insoles,
  - (b) perfectly flat built in insoles 7 having no arches, no wedged heels and no heels of any kind,
- (c) perfectly flat outer soles 3 being around one (1) inch or less, no arches, no wedges, and no heels of

any kind, and

(d) preferably tie skateboard shoes, flat stiff soled sturdy shoes or flat sturdy shoes 1.

Tie skateboard shoes or tie flat soled shoes are highly recommended for those with short hamstring muscles. The skateboard shoes or tie flat stiff soled shoes will help prevent the heels from literally stripping out of the shoes and help make toe more walking difficult. However, the tie skateboard shoes or tie flat stiff soled shoes, themselves, do not solve the problem. Buckled or sturdy

tennis shoes may be considered for those without short hamstring muscles. The flatness of the built in and outer soles can not be compromised in any way, since it helps minimize outward ankle rolls. Various other individualized needs are met by inserting the flat sheep skin rubber backed insoles or slipping in the original removable insoles which can have arch supports.

- 2. Make cardboard templates by tracing around the specified purchased shoe soles 3 with a medium felt tip marker. Do each sole separately and label them.
- 3. Cut each template out by using the outer line made by the marker. Check your work twice with the original soles 3. They must match exactly.
- 4. Tape and trace each cardboard template on heavy solid wood 4 about three-fourth (3/4) inch thick and then saw the thickness.
- 5. Tape and trace each cardboard template on the solid rubber layer 5 about one-half (1/2) inch thick and then cut the thickness.
  - 6. Remove the removable insoles from the specified purchased shoes.
- 7. Secure each wood layer 4 with fasteners 6 through the built in insoles 7 and cement with adhesive glue to the shoe soles 3. Numerous fasteners 6 will have to pass through the upper toe part 2 of the shoes. Sometimes the fasteners 6 can be somewhat hidden by using the manufactured stylist air spaces. The amount of fasteners 6 will be determined by the size and weight of the specified purchased shoes 1.

- 8. Cement each rubber sole 5 with adhesive glue to the wood layers 4.
- 9. Paint the edges of each wood sole layer 4 to match the sole edges 3 of the purchased shoes 1.
- 10. Slip in a flat sheep skin rubber backed insoles or the original removable soles. It is believed that the stiff soles and gravity pull will gently and painlessly lengthen the short hamstring muscles. Other believed benefits include helping: (a) hammer toes, (b) scissors gait, (c) unnecessary twisting foot movements, (d) poor walking posture, (e) skeletal realignment (f) weak leg muscles, (g) weak abdominal muscles, (h) abdominal breathing control, and (i) surprisingly encourages weight loss.

Since the present invention is being used primarily for indoor therapeutic purposes, using a wheeled walker to help obtain correct posture, balance and walking gait is crucial. ABSOLUTELY NO STEPS CONCERNING THIS PATENT.

The inexpensive shoe soles are customized to fit any sized specified purchased shoes. The simple soles of two layers provide orthopedic qualities and acts as gentle continual traction for the total physical body. The rubber soles are a safety measure and will help prevent falls. The simple effective inexpensive customized sole construction comprising of: (a) specified shoes, (b) wood, (c) rubber (d) fasteners, and (e) adhesive glue is a fractional cost compared to other alternatives. The manufactured cost will vary depending upon the required work, insole needs, weight and size of purchased shoes. However, this is a fractional cost compared to full length leg braces or surgery.

The previous description of the preferred embodiment of present invention is presented for illustration and description purposes. It is not intended to exhaust or

limit the present invention to the above exact form. As seen from the above teaching, many modifications and variations are possible. The intention of the scope of the present invention is not to be limited to the detailed description, but rather the following claims.

# **REQUIRED EXERCISES**

- 1. Stand by and hold on to railing for security. Begin strengthening heel muscles by placing back of one heel on step with both knees locked or past center. As heel muscles are strengthened progress to next high step. Exercise two (2) sets of three (3) for twenty (20) seconds with both legs.
- 2. Attempt to touch your toes with both knees locked or past center and hang there as a rag doll to the count of twenty (20) seconds.
- 3. Lay on the floor with your knees locked past center and propped upon an ottoman. Leave them there as long at possible.
  - 4. Walk as much as possible. The heel toe movement is a must.